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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,555	06/23/2000	Mazhar M. Alidina	Alidina 11-7	1001

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MENDELSON AND ASSOCIATES PC
1515 MARKET STREET
SUITE 715
PHILADELPHIA, PA 19102

EXAMINER

BAHTA, KIDEST

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 05/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,555

Applicant(s)

ALIDINA ET AL.

Examiner

Kidest Bahta

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Objections

1. Claims 2-9 and 11-14 are objected to because of the following informalities: the phrase, "The invention", in claims 2-9, should change to --the apparatus-- and the phrase, " the invention", in claims 11-14 should be change to --the method--,
Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns (U.S. Patent 6,009,451).

Regarding claims 1, 10 and 15, Burns discloses setting an overflow flag based on a shift value and input data for one of a plurality of operation executed in a bit manipulation unit (BMU), comprising: a first and second logical circuit, for a first and second subset of the plurality of operations, setting a first and a second overflow value based on the left and right shift value and input data (Fig. 4, Fig. 5, Fig. 6, Fig. 8 and Fig. 9); a selector providing either the first or the second overflow value as the overflow

flag based on signal identifying the one of the plurality of operations executed by the BMU (Fig. 7 and Fig. 14).

Regarding claims 2, 4, 11 and 12, Burns discloses comparing a number of redundant sign bits to a combination of most significant bits (MSBs) of the input data and the shift value (column 6, lines 60-65; column 7, lines 1-11; column 14, step 204); setting the first and second overflow value based on the comparison (column 7, lines 53-58) wherein the MSBs correspond to bit at positions for a set of guard bit in the input and at least one bit of the input data (column 7, lines 26-40, column 11, lines 31-53).

Regarding claims 3 and 5, Burns discloses an exponent module generating an exponent for the input data, the exponent module including means for prepending a sign to the exponent to generate a value corresponding to the number of redundant sign bits (column 6, lines 60-67; column 7, lines 1-11; column 7, lines 26-40); combiner adding the shift amount to the value corresponding to the number of redundant sign bits to form a combined value (column 5, lines 14-35); a comparator generating the comparison as the different between the combined value and the number of most significant bits of the input data (Abstract).

Regarding claims 7, 8 and 13, Burns discloses the circuit is embodied in an integrated circuit (Fig. 1).

Regarding claims 1, 10 and 15, Burns discloses that the embodied in either a digital signal processor, microprocessor, micro-controller or application-specific integrated circuit (Fig. 1, element 10, i.e., digital signal processor).

Allowable Subject Matter

Art Unit: 2125

4. Claim 6 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

6. Any inquiry concerning communication or earlier communication from the examiner should be directed to Kidest Bahta, whose telephone number is (703) 308-6103. The examiner can normally be reached on M-F from 7:30 a.m. to 4:00 p.m. EST. If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached (703) 308-0538. Additionally, the fax phone for Art Unit 2125 is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Kidest Bahta

May 10, 2004

A handwritten signature in black ink, appearing to read 'Kidest Bahta', is written over the typed name and date.